

IN THE CLAIMS

Please amend the claims as follows:

1-24. (Canceled)

25. (Currently Amended) A system, comprising:

an implantable monitoring circuit comprising:

a first sensing input configured to receive information indicative of a ventricular electrical signal corresponding to a ventricular event;

a second sensing input configured to receive information indicative of an atrial electrical signal corresponding to an atrial event; and

a memory circuit configured to store an adjustable blanking interval; ~~setting~~;

an implantable therapy circuit configured to provide electrical energy to be therapeutically delivered to a heart as directed by the implantable monitoring circuit; [[and]]

wherein the implantable monitoring circuit is configured to inhibit sensing, ~~ignore~~, for at least the purpose of directing the implantable therapy circuit to provide pacing therapy, for a duration corresponding to the adjustable blanking interval, of ~~setting~~, at least one of (1) the atrial electrical signal when the information indicative of the ventricular electrical signal received by the first sensing input includes a ~~an~~ intrinsic ventricular event, or (2) the ventricular electrical signal when the information indicative of the atrial electrical signal received by the second sensing input includes an intrinsic atrial event; ~~event~~.

wherein the implantable monitoring circuit is configured to receive the information indicative of at least one of (1) the atrial electrical signal, or (2) the ventricular electrical signal, during a noise window interval, the noise window interval derived from a difference between a preset refractory period and the adjustable blanking interval; and

wherein the implantable monitoring circuit is configured to ignore the information received during the noise window interval, for at least the purpose of directing the implantable therapy circuit to provide pacing therapy.

26. (Currently Amended) The system of claim 25, ~~wherein the adjustable blanking setting is an adjustable blanking interval; and~~

wherein the implantable monitoring circuit is configured to inhibit sensing, ~~ignore~~, for at least the purpose of directing the implantable therapy circuit to provide pacing therapy, for a duration specified by the adjustable blanking interval, of the atrial electrical signal when the information indicative of the ventricular electrical signal includes an intrinsic ventricular event.

27. (Currently Amended) The system of claim 25, ~~[[26,]]~~ wherein the implantable monitoring circuit is configured to inhibit sensing, for a duration specified by the adjustable blanking interval, ~~discard the information indicative of the atrial electrical signal~~ signal, for a duration specified by the adjustable blanking interval, when the information indicative of the ventricular electrical signal includes a paced ~~an intrinsic~~ ventricular event.

28. (Currently Amended) The system of claim 25 ~~[[26,]]~~ wherein the implantable monitoring circuit is configured to disable the second sensing input, for a duration specified by the adjustable blanking interval, when the information indicative of the ventricular electrical signal includes the an intrinsic ventricular event, ~~event~~; and

wherein the implantable monitoring circuit is configured to enable the second sensing input during the noise window interval, while ignoring the information received by the second sensing input, during the noise window interval, for the purpose of directing the implantable therapy circuit to provide pacing therapy.

29. (Currently Amended) The system of claim 25, ~~wherein the adjustable blanking setting is an adjustable blanking interval; and~~

wherein the implantable monitoring circuit is configured to inhibit sensing ~~ignore~~, for at least the purpose of directing the implantable therapy circuit to provide pacing therapy, for a duration specified by the adjustable blanking interval, of the ventricular electrical signal when the information indicative of the atrial electrical signal includes an intrinsic atrial event.

30. (Currently Amended) The system of claim ~~25~~, ~~[[29,]]~~ wherein the implantable monitoring circuit is configured to inhibit sensing, for a duration specified by the adjustable blanking interval, ~~discard the information indicative of the ventricular electrical signal,~~ for a duration specified by the adjustable blanking interval, when the information indicative of the atrial electrical signal includes a paced ~~an intrinsic~~ atrial event.

31. (Currently Amended) The system of claim 29, wherein the implantable monitoring circuit is configured to disable the first sensing input, for a duration specified by the adjustable blanking interval, when the information indicative of the atrial electrical signal includes the ~~an intrinsic~~ atrial ~~event,~~ event; and

wherein the implantable monitoring circuit is configured to enable the first sensing input during the noise window interval, while ignoring the information received by the first sensing input, during the noise window interval, for the purpose of directing the implantable therapy circuit to provide pacing therapy.

32. (Currently Amended) The system of claim 25, ~~wherein the adjustable blanking setting includes a first adjustable blanking interval and a second adjustable blanking interval;~~ and

wherein the implantable monitoring circuit is configured to disable sensing, ~~ignore,~~ for at least the purpose of directing the implantable therapy circuit to provide pacing therapy, for a duration specified by ~~[[the]]~~ a first adjustable blanking interval, of the ventricular electrical signal when the information indicative of the atrial electrical signal includes an intrinsic atrial event; and

wherein the implantable monitoring circuit is configured to disable sensing, ~~ignore,~~ for at least the purpose of directing the implantable therapy circuit to provide pacing therapy, for a duration specified by ~~[[the]]~~ a second adjustable blanking interval, of the atrial electrical signal when the information indicative of the ventricular electrical signal includes an intrinsic ventricular event.

33. (Currently Amended) The system of claim 25, further comprising:
an external interface device comprising a user input configured to receive the adjustable blanking interval setting from a user;
wherein the external interface device is configured to transmit the adjustable blanking interval setting to the implantable monitoring circuit; and
wherein the implantable monitoring circuit is configured to store the received adjustable blanking interval setting in the memory circuit.
- 34-35. (Canceled)
36. (Previously Presented) The system of claim 25, further comprising:
a first lead coupled to the first sensing input and configured to sense the ventricular electrical signal;
a second lead coupled to the second sensing input and configured to sense the atrial electrical signal; and
wherein the implantable therapy circuit is coupled to at least one of the first or second leads.
37. (Currently Amended) A memory circuit within an implantable device, the memory circuit comprising instructions for operating the implantable device, the instructions when performed by a processor within the implantable device causing the implantable device to:
store an adjustable blanking interval; setting;
receive information indicative of a ventricular electrical signal corresponding to a ventricular event;
receive information indicative of an atrial electrical signal corresponding to an atrial event;
therapeutically deliver electrical energy to a heart using the information indicative of at least one of the ventricular electrical signal or the atrial electrical signal; and
inhibit sensing, ignore, for at least the purpose of therapeutically delivering pacing therapy to the heart, for a duration corresponding to the adjustable blanking setting, interval, of at

least one of (1) the atrial electrical signal when the information indicative of the ventricular electrical signal includes the an intrinsic-ventricular event, or (2) the ventricular electrical signal when the information indicative of the atrial electrical signal includes the an intrinsic-atrial event; event.

wherein the instructions causing the implantable device to receive the information indicative of the ventricular electrical signal or the atrial electrical signal include causing the implantable device to ignore, for at least the purpose of therapeutically delivering pacing therapy to the heart, for a duration specified by the first adjustable blanking interval, the information received during a noise window interval, the noise window interval derived from a difference between a present refractory period and the adjustable blanking interval.

38. (Currently Amended) The memory circuit of claim 37, ~~wherein the instructions causing the implantable device to store the adjustable blanking setting include causing the implantable device to store a adjustable blanking interval; and~~

wherein the instructions causing the implantable device to inhibit sensing, for a duration specified by the adjustable blanking interval, disregard of the atrial or the ventricular electrical signal include causing the implantable device inhibit sensing, to ignore, for at least the purpose of therapeutically delivering pacing therapy to the heart, for a duration specified by the adjustable blanking interval, of the atrial electrical signal when the information indicative of the ventricular electrical signal includes an intrinsic ventricular event.

39. (Currently Amended) The memory circuit of claim 37,[[38,]] wherein the instructions causing the implantable device to inhibit sensing, for a duration specified by the adjustable blanking interval, disregard of the atrial electrical signal include causing the implantable device to inhibit sensing, for a duration specified by the adjustable blanking interval, discard information indicative of the atrial electrical signal, for a duration specified by the adjustable blanking interval, when the information indicative of the ventricular electrical signal includes a paced an intrinsic-ventricular event.

40. (Currently Amended) The memory circuit of claim 37, ~~[[38,]]~~ wherein the instructions causing the implantable device to inhibit sensing, for a duration specified by the adjustable blanking interval, disregard of the atrial electrical signal include causing the implantable device to disable a sensing input from receiving information indicative of the atrial electrical signal, for a duration specified by the adjustable blanking interval, when the information indicative of the ventricular electrical signal includes the an-intrinsic ventricular event, event; and

wherein the instructions include causing the implantable device to enable the sensing input to receive information indicative of the atrial electrical signal, during the noise window interval, while causing the implantable device to ignore the information received by the sensing input, during the noise window interval, for the purpose of therapeutically delivering pacing therapy to the heart.

41. (Currently Amended) The memory circuit of claim 37, ~~wherein the instructions causing the implantable device to store the adjustable blanking setting include causing the implantable device to store a adjustable blanking interval; and~~

wherein the instructions causing the implantable device to inhibit sensing, for a duration specified by the adjustable blanking interval, disregard of the atrial or the ventricular electrical signal include causing the implantable device to inhibit sensing, ignore, for at least the purpose of therapeutically delivering pacing therapy to the heart, for a duration specified by the adjustable blanking interval, of the ventricular electrical signal when the information indicative of the atrial electrical signal includes an intrinsic atrial event.

42. (Currently Amended) The memory circuit of claim 37, ~~[[41,]]~~ wherein the instructions causing the implantable device to inhibit sensing, for a duration specified by the adjustable blanking interval, disregard of the ventricular signals include causing the implantable device to inhibit sensing, for a duration specified by the adjustable blanking interval, discard information indicative of the ventricular electrical signal, for a duration specified by the adjustable blanking interval, when the information indicative of the atrial electrical signal includes a paced an intrinsic atrial event.

43. (Currently Amended) The memory circuit of claim 37, ~~[[41,]]~~ wherein the instructions causing the implantable device to inhibit sensing, for a duration specified by the adjustable blanking interval, disregard of the ventricular electrical signal ~~signals~~ include causing the implantable device to disable a sensing input from receiving information indicative of the ventricular electrical signal, for a duration specified by the adjustable blanking interval, when the information indicative of the atrial electrical signal includes the [[an]] intrinsic atrial event; and ~~event.~~

wherein the instructions include causing the implantable device to enable the sensing input to receive information indicative of the ventricular electrical signal, during the noise window interval, while causing the implantable device to ignore the information received by the sensing input, during the noise window interval, for the purpose of therapeutically delivering pacing therapy to the heart.

44. (Currently Amended) The memory circuit of claim 37, wherein the instructions ~~causing the implantable device to store the adjustable blanking setting~~ include causing the implantable device to store a first adjustable blanking interval and a second adjustable blanking interval; and

wherein the instructions causing the implantable device to inhibit sensing of ~~disregard~~ the atrial or ventricular signals include causing the medical device to:

disable sensing, ignore, for at least the purpose of therapeutically delivering pacing therapy to the heart, for a duration specified by the first adjustable blanking interval, of the ventricular electrical signal when the information indicative of the atrial electrical signal includes an intrinsic atrial event; and

disable sensing, ignore, for at least the purpose of therapeutically delivering pacing therapy to the heart, for a duration specified by the second adjustable blanking interval, of the atrial electrical signal when the information indicative of the ventricular electrical signal includes an intrinsic ventricular event.

45. (Currently Amended) The memory circuit of claim 37, comprising instructions causing the implantable device to receive the adjustable blanking interval ~~setting~~ from an external interface device; and

wherein the external interface device is configured to receive the adjustable blanking interval ~~setting~~ from a user and configured to transmit the adjustable blanking interval ~~setting~~ to the implantable device.

46-47. (Canceled)